

Mr. Paul Coburn
Whirlpool Corporation
5401 U. S. 41 North
Evansville, Indiana 47727

Re: 163-13859-00022
Second Administrative Amendment to
Part 70 permit No.: T163-7467-00022

Dear Mr. Paul Coburn:

Whirlpool Corporation was issued a Part 70 permit on July 13, 1999 for a household refrigerators and ice makers manufacturing plant. A letter requesting a change to the Part 70 was received on February 2, 2000. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended to incorporate the construction and operation of the following new equipment permitted in PSD/Significant Source Modification 163-12457-00022 (changes are bolded and deletions are struck-through for emphasis):

- (a) One (1) Foam-in-Place (FIP) Line No. 4, designated as Emission unit (EU-15), that will be utilized for variety of refrigerator models. This line is a closed-pour system where wet foam is injected through holes in the fully fabricated door panel;
- (b) Three (3) electric pre-heat ovens, associated with the FIP Line No. 4; one rated at 13 kilowatts (KW), one rated at 19KW; and one rated at 24 KW. The preheaters are used to warm the steel refrigerator, freezer doors and plastic liners; and
- (c) Two (2) closed and slightly pressurized chemical day tanks, associated with the FIP Line No. 4; one 150 gallon tank holding the polyol and blowing agent (HCFC-141b) master batch mixture and one 150 gallon tank holding the isocyanate compound (MDI).

1. Section A.2 page 7 of 52 is amended to include the new equipment and numbered as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) through (g) No changes

- (h) **One (1) Foam-in-Place (FIP) Line No. 4, designated as Emission unit (EU-15), that will be utilized for variety of refrigerator models. This line is a closed-pour system where wet foam is injected through holes in the fully fabricated door panel;**
- (i) **Three (3) electric pre-heat ovens, associated with the FIP Line No. 4; one rated at 13 kilowatts (KW), one rated at 19KW; and one rated at 24 KW. The preheaters are used to warm the steel refrigerator, freezer doors and plastic liners; and**
- (j) **Two (2) closed and slightly pressurized chemical day tanks, associated with the FIP Line No. 4; one 150 gallon tank holding the polyol and blowing agent (HCFC-**

141b) master batch mixture and one 150 gallon tank holding the isocyanate compound (MDI).

2. Section D.8 was added in the Part 70 permit as follows:

Section D.8 FACILITY OPERATION CONDITIONS

- (h) One (1) Foam-in-Place (FIP) Line No. 4, designated as Emission unit (EU-15), that will be utilized for variety of refrigerator models. This line is a closed-pour system where wet foam is injected through holes in the fully fabricated door panel;
- (i) Three (3) electric pre-heat ovens, associated with the FIP Line No. 4; one rated at 13 kilowatts (KW), one rated at 19KW; and one rated at 24 KW. The preheaters are used to warm the steel refrigerator, freezer doors and plastic liners; and
- (j) Two (2) closed and slightly pressurized chemical day tanks, associated with the FIP Line No. 4; one 150 gallon tank holding the polyol and blowing agent (HCFC-141b) master batch mixture and one 150 gallon tank holding the isocyanate compound (MDI).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) Determination [326 IAC 2-2 and 40 CFR 52.21]

- (a) The use of the current blowing agent HCFC-141b in the proposed Foam-in place Line 4, until January 1, 2003 when HFC-245fa would be available for commercial use. The IDEM, OAQ shall be notified when the switch from HCFC-141b into HFC-245fa will be made.
- (b) The maximum wet chemical usage for the proposed Foam-in place Line 4 shall be limited to 2,948,400 pounds per twelve month total, rolled on a monthly basis. This wet chemical usage limitation and a loss factor of 0.026 pound of ozone depleting substance (ODS) per pound of wet chemical used will limit the ODS emissions to 38.3 tons per twelve month total rolled on a monthly basis.

During the first twelve month of operation, the wet chemical usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 245,700 pounds per month, which shall result in an emissions of 3.2 tons of ODS per month, rolled on a monthly basis.
- (c) The West Laminator shall not be put back in operation.
- (d) Compliance with sections (a) through (c) of this condition shall satisfy the requirements under 326 IAC 2-2 Prevention of Significant Deterioration, and 40 CFR 52.21.
- (e) Compliance with (a) through (c) of this condition shall not apply to the operation of Foam-in-Place Line NO. 4 upon the conversion of its foam blowing agent to HFC-245fa and proper notification shall be made to IDEM, OAQ pursuant to Condition D.8.1(a).

- (f) The Permittee shall be permitted to conduct a production scale trial operations using HFC-245fa as the blowing agent on the proposed FID Line No. 4 and the other rigid polyurethane foaming lines. The duration of the trial operation shall not last more than thirty (30) days of total operating time.

D.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of the issued Part 70 permit T163-7467-00022, is required for this facility.

Compliance Determination Requirements

D.8.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Compliance tests shall be performed during the period between 60 days after achieving maximum production rate but no later than 180 days after initial start-up on the proposed Foam-in-Place (FIP) Line No. 4, to verify the ozone depleting substance (ODS) loss factor of 0.026 pound per pound of wet chemical used (lb/lb).
- (b) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Evansville EPA
101 N.W. Martin Luther King Jr., Blvd., Room 250
Evansville, Indiana 47708

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, and Evansville EPA no later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and Evansville EPA if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.4 Record Keeping Requirements

- (a) To document compliance with Condition D.8.1, the Permittee shall maintain monthly records of the wet chemical used. Records maintained shall be taken monthly and shall be complete and sufficient to establish compliance with the ODS usage and emission limits established in Condition D.8.1.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the issued Part 70 permit T163-7467-00022.
- (c) Compliance with section (a) and (b) of this condition shall not apply to the operation of Foam-in-Place Line No. 4 upon the conversion of its foam blowing agent to HFC-245fa.

D.8.5 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.8.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter period being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-7-1(34).
- (b) Compliance with the reporting requirements of this condition shall not apply to the operation of Foam-in-Place Line No. 4 upon the conversion of its foam blowing agent to HFC-245fa.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION
and
Evansville EPA

Part 70 Source Modification Quarterly Report

Source Name: Whirlpool Corporation
Source Address: 5401 U.S. Highway 41 North, Evansville, Indiana 47727
Mailing Address: 5401 U.S. Highway 41 North, Evansville, Indiana 47727
PSD/Significant Source Modification No.: 163-12457-00022
Facility: Foam-in-Place (FIP) Line No. 4, designated as Emission unit (EU-15)
Parameter: Ozone depleting substance (ODS)
Limit: The maximum wet chemical usage for the proposed Foam-in place Line 4 shall be limited to 2,948,400 pounds per twelve month total, rolled on a monthly basis. This wet chemical usage limitation and a loss factor of 0.026 pound of ozone depleting substance (ODS) per pound of wet chemical used will limit the ODS emissions to 38.3 tons per twelve month total rolled on a monthly basis.

During the first twelve month of operation, the wet chemical usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 245,700 pounds per month, which shall result to an emissions of 3.2 tons of ODS per month, rolled on a monthly basis.

YEAR: _____

Month	Column 1		Column 2		Column 1 + Column 2	
	Wet chemical Usage This Month	Equivalent ODS Emissions This Month	Wet chemical Usage Previous 11 Months	Equivalent ODS Emissions Previous 11 Months	Wet chemical Usage 12 Month Total	Equivalent ODS Emissions 12 Month Total
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman, at (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

APD

cc: File - Vanderburgh County
U.S. EPA, Region V
Vanderburgh County Health Department
Evansville EPA
Southwest Regional Office
Air Compliance Section Inspector - Scott Anslinger
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

**PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY
AND
CITY OF EVANSVILLE ENVIRONMENTAL
PROTECTION AGENCY**

**Whirlpool Corporation
5401 U.S. 41 North
Evansville, Indiana 47727**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T163-7467-00022	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: July 13, 1999

1st Administrative Amendment 163-11817-00022 Issued: April 7, 2000

2 nd Administrative Amendment 163-13859-00022	Pages Affected: 7, 44 Pages Added: 44a, 44b, 44c, 44d
Issued by: Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date:

thousand pounds per hour (11,000 lb/hr) of raw material, and exhausting to stack S1-1.

- (g) One (1) Expanded Polystyrene Process, identified as F12, with a maximum usage of five-hundred pounds per hour (500 lb/hr) of raw material, and exhausting to room.
- (h) One (1) Foam-in-Place (FIP) Line No. 4, designated as Emission unit (EU-15), that will be utilized for variety of refrigerator models. This line is a closed-pour system where wet foam is injected through holes in the fully fabricated door panel.
- (i) Three (3) electric pre-heat ovens, associated with the FIP Line No. 4; one rated at 13 kilowatts (KW), one rated at 19KW; and one rated at 24 KW. The preheaters are used to warm the steel refrigerator, freezer doors and plastic liners.
- (j) Two (2) closed and slightly pressurized chemical day tanks, associated with the FIP Line No. 4; one 150 gallon tank holding the polyol and blowing agent (HCFC-141b) master batch mixture and one 150 gallon tank holding the isocyanate compound (MDI).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- One (1) Natural Gas-fired Boiler less than ten million British thermal units per hour (1.527 MMBtu/hr).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.8 FACILITY OPERATION CONDITIONS

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- (b) The maximum wet chemical usage for the proposed Foam-in place Line 4 shall be limited to 2,948,400 pounds per twelve month total, rolled on a monthly basis. This wet chemical usage limitation and a loss factor of 0.026 pound of ozone depleting substance (ODS) per pound of wet chemical used will limit the ODS emissions to 38.3 tons per twelve month total rolled on a monthly basis.

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- (c) The West Laminator shall not be put back in operation.
- (d) Compliance with sections (a) through (c) of this condition shall satisfy the requirements under 326 IAC 2-2 Prevention of Significant Deterioration, and 40 CFR 52.21.
- (e) Compliance with (a) through (c) of this condition shall not apply to the operation of Foam-in-Place Line N0. 4 upon the conversion of its foam blowing agent to HFC-245fa and proper notification shall be made to IDEM, OAQ pursuant to Condition D.8.1(a).
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and

Evansville EPA
101 N.W. Martin Luther King Jr., Blvd., Room 250
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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION
and
Evansville EPA
Part 70 Source Modification Quarterly Report

Source Name: Whirlpool Corporation
Source Address: 5401 U.S. Highway 41 North, Evansville, Indiana 47727
Mailing Address: 5401 U.S. Highway 41 North, Evansville, Indiana 47727
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YEAR: _____

Month	Column 1		Column 2		Column 1 + Column 2	
	Wet chemical Usage This Month	Equivalent ODS Emissions This Month	Wet chemical Usage Previous 11 Months	Equivalent ODS Emissions Previous 11 Months	Wet chemical Usage 12 Month Total	Equivalent ODS Emissions 12 Month Total
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

